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- 15. The mobile personal computing device of claim 14, wherein the electrical measurement obtained using the electrical contacts corresponds to an electrical property across the user's chest.
- **16**. The mobile personal computing device of claim **13**, 5 wherein the processing unit is further configured to:

use at least the proximity sensor to emit the light;

- use the ambient light sensor and the camera to receive the reflected light; and
- compute a blood pressure index, a body fat content, and 10 an electrocardiogram using data from the ambient light sensor, the camera, and the electrical contacts.
- 17. The mobile personal computing device of claim 13, wherein the proximity sensor is a multiple light wavelength proximity sensor that utilizes infrared and visible light, the 15 ambient light sensor is a indium gallium arsenide ambient light sensor, and the processing unit is further configured to: use at least the proximity sensor to emit the light;

use the ambient light sensor and the camera receive the reflected light; and

- compute a blood hydration using data from the ambient light sensor, the camera, and the electrical contacts.
- 18. The mobile personal computing device of claim 1, wherein the processing unit is further configured to:
 - use at least the ambient light sensor and the camera 25 receive the reflected light; and
 - compute an oxygen saturation, a pulse rate, a perfusion index, or a photoplethysmogram using data from the ambient light sensor and the camera.
- **19**. The mobile personal computing device of claim 1, 30 wherein the processing unit is configured to use data from the camera indicating characteristics of the body part that

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influence light absorption to adjust the sensor data regarding the received light as part of computing the health data.

- **20**. A method for using a mobile personal computing device to obtain health data, comprising:
 - using a camera and a proximity sensor to emit light into a body part of a user touching a surface of the mobile personal computing device;
 - using at least two of the camera, an ambient light sensor, or the proximity sensor to receive at least part of the emitted light reflected by the body part of the user and generate sensor data; and
 - computing health data of the user, utilizing the processing unit, using at least the sensor data regarding the received light.
- 21. A computer program product including a non-transitory storage medium, comprising:
 - a first set of instructions, stored in the non-transitory storage medium, executable by at least one processing unit to use a camera and a proximity sensor to emit light into a body part of a user touching a surface of a mobile personal computing device;
 - a second set of instructions, stored in the non-transitory storage medium, executable by the least one processing unit to use the camera and an ambient light sensor to receive at least part of the emitted light reflected by the body part of the user and generate sensor data; and
 - a third set of instructions, stored in the non-transitory storage medium, executable by the least one processing unit to compute health data of the user using at least the sensor data regarding the received light.

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